

conducting mass spectrophotometric analysis on said sample;  
evidencing and categorizing at least one biopolymer marker  
sequence or analyte thereof isolated from said sample; and,

comparing said at least one isolated biopolymer marker  
sequence or analyte thereof to the biopolymer marker sequence as  
set forth in claim 1;

wherein correlation of said isolated biopolymer marker and  
said biopolymer marker sequence as set forth in claim 1 evidences  
and categorizes said at least one disease state.

4. (New) The method of claim 3, wherein said step of evidencing  
and categorizing is particularly directed to biopolymer markers or  
analytes thereof linked to at least one risk of disease development  
of said patient.

5. (New) The method of claim 3, wherein said step of evidencing  
and categorizing is particularly directed to biopolymer markers or  
analytes thereof related to the existence of a particular disease  
state.

6. (New) The method of claim 3, wherein the sample is an  
unfractionated body fluid or a tissue sample.

7. (New) The method of claim 3, wherein said sample is at least one of the group consisting of blood, blood products, urine, saliva, cerebrospinal fluid, and lymph.

8. (New) The method of claim 3, wherein said mass spectrophotometric analysis is Surface Enhanced Laser Desorption Ionization (SELDI) mass spectrometry (MS).

9. (New) The method of claim 3, wherein said patient is a human.

10. (New) A diagnostic assay kit for determining the presence of the biopolymer marker or analyte thereof of claim 1 comprising:

at least one biochemical material which is capable of specifically binding with a biomolecule which includes at least said biopolymer marker or analyte thereof, and

means for determining binding between said biochemical material and said biomolecule.

11. (New) The diagnostic assay kit of claim 10, wherein said biochemical material or biomolecule is immobilized on a solid support.

12. (New) The diagnostic assay kit of claim 10 including:  
at least one labeled biochemical material.

13. (New) The diagnostic assay kit of claim 10, wherein said biochemical material is an antibody.

14. (New) The diagnostic assay kit of claim 12, wherein said labeled biochemical material is an antibody.

15. (New) The diagnostic assay kit of claim 10, wherein the sample is an unfractionated body fluid or a tissue sample.

16. (New) The diagnostic assay kit of claim 10, wherein said sample is at least one of the group consisting of blood, blood products, urine, saliva, cerebrospinal fluid, and lymph.

17. (New) The diagnostic assay kit of claim 10, wherein said marker includes the sequence ID GDFLAEGGGVR and said biochemical material is at least one monoclonal antibody specific therefore.

18. (New) A kit for diagnosing, determining risk-assessment, and identifying therapeutic avenues related to a disease state comprising:

at least one biochemical material which is capable of specifically binding with a biomolecule which includes at least one biopolymer marker including the sequence ID GDFLAEGGGVR or an analyte thereof related to said disease state; and

means for determining binding between said biochemical material and said biomolecule;

64 whereby at least one analysis to determine a presence of a marker, analyte thereof, or a biochemical material specific thereto, is carried out on a sample.

19. (New) The kit of claim 18, wherein said biochemical material or biomolecule is immobilized on a solid support.

20. (New) The kit of claim 18 including:  
at least one labeled biochemical material.

Alcant 21. (New) The kit of claim 18, wherein said biochemical material is an antibody.

22. (New) The kit of claim 20, wherein said labeled biochemical material is an antibody.

23. (New) The kit of claim 18, wherein the sample is an unfractionated body fluid or a tissue sample.

24. (New) The kit of claim 18, wherein said sample is at least one of the group consisting of blood, blood products, urine, saliva, cerebrospinal fluid, and lymph.

Sub B5  
25. (New) The kit of claim 18, wherein said marker includes the sequence ID GDFLAEGGGVR or at least one analyte thereof and said biochemical material is at least one monoclonal antibody specific therefore.

26. (New) The kit of claim 18, wherein said diagnosing, determining risk assessment, and identifying therapeutic avenues is carried out on a single sample.

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27. (New) The kit of claim 18, wherein said diagnosing, determining risk assessment, and identifying therapeutic avenues is carried out on multiple samples such that at least one analysis is carried out on a first sample and at least another analysis is carried out on a second sample.

28. (New) The kit of claim 27, wherein said first and second samples are obtained at different time periods.

Sub B6  
29. (New) Polyclonal antibodies produced against the marker sequence ID GDFLAEGGGVR in at least one animal host.

Sub B7  
30. (New) An antibody that specifically binds a biopolymer, including the marker sequence ID GDFLAEGGGVR or at least one analyte thereof.

31. (New) The antibody of claim 30 that is a monoclonal antibody.

32. (New) The antibody of claim 30 that is a polyclonal antibody.

Sub B8  
33. (New) A process for identifying therapeutic avenues related to a disease state comprising:

conducting an analysis as provided by the kit of claim 18; and

interacting with a biopolymer including the sequence ID

GDFLAEGGGVR or at least one analyte thereof;

whereby therapeutic avenues are developed.

Sub B9  
34. (New) The process for identifying therapeutic avenues related to a disease state in accordance with claim 33, wherein said therapeutic avenues regulate the presence or absence of the biopolymer including the sequence ID GDFLAEGGGVR or at least one analyte thereof.

Sub B10  
35. (New) A process for regulating a disease state by controlling the presence or absence of a biopolymer including the sequence ID GDFLAEGGGVR or at least one analyte thereof.